

## PATENT COOPERATION TREA



### **PCT**

#### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference M/43220-PCT	FOR FURTHER ACTION		cation of Transmittal of International Examination Report (Form PCT/IPEA/416)
International application No.	International filing date (d	ay/month/year)	Priority date (day/month/year)
PCT/EP2003/011824	24 October 2003 (2	4.10.2003)	25 October 2002 (25.10.2002)
International Patent Classification (IPC) or n C08G 18/08	ational classification and IP		
Applicant	<del> </del>		
••	BASF AKTIENGESI	LLSCHAFT	
L			
This international preliminary exam     and is transmitted to the applicant acts.	ination report has been prepaceording to Article 36.	red by this Intern	national Preliminary Examining Authority
2. This REPORT consists of a total of	4 sheets, incl	ading this cover s	sheet.
amended and are the basis for 70.16 and Section 607 of the	r this report and/or sheets co Administrative Instructions	ntaining rectifica under the PCT).	on, claims and/or drawings which have been ations made before this Authority (see Rule
These annexes consist of a to	tal of sheet	s	
3. This report contains indications related	ting to the following items:		
I Basis of the report			
II Priority			
III Non-establishment o	of opinion with regard to nov	elty, inventive st	ep and industrial applicability
IV Lack of unity of invo	ention		
v Reasoned statement citations and explan	under Article 35(2) with regations supporting such stater	ard to novelty, in	ventive step or industrial applicability;
VI Certain documents of	ited		
VII Certain defects in th	e international application		
VIII Certain observations	on the international applica	tion	
<del></del>			
Date of submission of the demand	Dat	e of completion o	of this report
17 May 2004 (17.05.2	004)	28 Ja	anuary 2005 (28.01.2005)
Name and mailing address of the IPBA/EP	Aut	horized officer	
Facsimile No.	Tel	phone No.	



is ational application No.

PCT/EP2003/011824

I. Basis	of the re	port	
1. With	regard to	the elements of the international application:*	
	the inter	mational application as originally filed	
	the desc	ription:	
	pages	1-31	, as originally filed
ł	pages		, filed with the demand
]	pages	, filed with the letter of	
	the clair	ms:	
	pages	1-10	, as originally filed
l	pages	, as amended (together with any stat	ement under Article 19
1	pages		
[	pages	, filed with the letter of	
	the draw	·	
	pages	1/2 2/2	as asisisalla. Elad
	pages		
	· ·	, filed with the letter of	, med with the demand
l			
▎╚	_	nce listing part of the description:	
	pages _		<del></del>
1	pages _		
Ī	pages _	, filed with the letter of	
the in	iternation:	the language, all the elements marked above were available or furnished to this Authority is all application was filed, unless otherwise indicated under this item.  It is were available or furnished to this Authority in the following language	n the language in which which is:
		guage of a translation furnished for the purposes of international search (under Rule 23.1(b)).	
		guage of publication of the international application (under Rule 48.3(b)).	
	the lang or 55.3)	guage of the translation furnished for the purposes of international preliminary examination.	(under Rule 55.2 and/
3. With prelin	regard ominary ex	to any nucleotide and/or amino acid sequence disclosed in the international applica amination was carried out on the basis of the sequence listing:	tion, the international
	containe	ed in the international application in written form.	
	filed tog	gether with the international application in computer readable form.	
	furnishe	ed subsequently to this Authority in written form.	
	furnishe	ed subsequently to this Authority in computer readable form.	
	The sta internati	stement that the subsequently furnished written sequence listing does not go beyond ional application as filed has been furnished.	the disclosure in the
	The stat	tement that the information recorded in computer readable form is identical to the written mished.	n sequence listing has
4.	The ame	endments have resulted in the cancellation of:	
	tl	he description, pages	
	L t	he claims, Nos	•
		he drawings, sheets/fig	
5.	This repo	ort has been established as if (some of) the amendments had not been made, since they have he disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).**	been considered to go
* Replace in this and 70	s report	neets which have been furnished to the receiving Office in response to an invitation under Ari as "originally filed" and are not annexed to this report since they do not contain am	ticle 14 are referred to endments (Rule 70.16
	•	nt sheet containing such amendments must be referred to under item 1 and annexed to this rep	ort.

#### INTERNATIONAL PRELIMINARY EXAMINATION REPORT

Inte	nal	application No.
PCT/E	EP	03/11824

v.	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability;
	citations and explanations supporting such statement

-Statement		- •	
Novelty (N)	Claims	3, 4, 6, 7	YES
	Claims	1, 2, 5, 8-10	NO
Inventive step (IS)	Claims		YES
	Claims	1, 2, 5, 8-10	NO
Industrial applicability (IA)	Claims	1-10	YES
made approximation (2.5)	Claims		NO

#### 2. Citations and explanations

This report makes reference to the following documents:

D1: WO 02 36695 A

D2: US-A-5 418 301

# 1. Novelty (PCT Article 33(2)) and inventive step (PCT Article 33(3))

D1 discloses plastic films produced from polypropylene, polyethylene terephthalate and polyamide (as <u>substrates</u>) overlaid with hyperbranched polyurethanes (PU) comprising both urethane groups and urea groups. It is assumed in light of the differing chemical structure (COOH-and/or OH-termination) and the consequent differing physical properties of the hyperbranched polyurethanes compared with the substrate that the surface properties of the substrate are modified by deposition of the hyperbranched polymer (D1: hyperbranched polyurea-polyurethane produced from HDI and diethanolamine, hyperbranched polyurethane produced from HDI, DMPA and TMP, examples 1 and 6; high degree of branching associated with AB<sub>x</sub>

monomers, where x = 2-8, page 4, lines 26-33; PP, PET and PA films as substrates coated with printing ink prepared using the named hyperbranched polyurethanes as binding agents, table 2, examples 10 and 14).

D2 discloses an aqueous dendritic and thus hyperbranched polyester-polyurethane dispersion used with melamine resin to coat a glass substrate. The surface properties of the glass substrate are modified by the resultant PU coating (D2: aqueous PU dispersion based a dendritic polyester, cured coating produced therefrom on glass plates: example 52, table 1).

The subject matter of claims 1, 2, 5 and 8-10 is thus anticipated by D1 and D2 independently of each other and the application consequently does not meet the requirement of PCT Article 33(2).